SUPPORT DOCUMENT 000012-4

(File sup3.doc)

for the Air Operating Permit issued to

Weyerhaeuser Paper Company
P.O. Box 188
Longview, Washington 98632

State of Washington
DEPARTMENT OF ECOLOGY
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Table of Contents

INTRODUCTION

This Operating Permit Support Document fulfills the operating permit rule "Statement of Basis" requirement and explains particular portions of the air operating permit for the Weyerhaeuser Paper Company.

This document is not part of the operating permit for Weyerhaeuser Paper Company. Nothing in this document is enforceable against the permittee, unless otherwise made enforceable by permit or order.

STATEMENT OF BASIS

When the Department of Ecology issues a draft operating permit, it is required to provide a statement that sets forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions. [WAC 173-401-700(8).]

I. Assuring Compliance With All Applicable Requirements

Copies of the state Regulatory Orders that impose limitations and requirements on the permittee are provided in Appendix D of this permit. Orders are not intended to be separate legal sources for default limitations that are based in state regulations. Therefore, for limits derived directly from state regulations that were included in Regulatory Orders for convenience purposes, Ecology considers the regulation and not the Order to be the "applicable requirement" for purposes of Title V. Consequently, the permit does not cite the Order as an applicable requirement for regulatory limits; for these limits, the permit cites only the regulation as the underlying applicable requirement.

II. Comments on Specific Permit Conditions

1. Permit Condition A.1

NORPAC uses old newsprint (ONP) as part of the fiber source. The ONP baghouse addresses industrial hygiene concerns about airborne particulate generated in the handling of old newsprint. See page 5-10 of the Application for more specifics about the ONP baghouse. The original NOC approval for this unit imposed a once every 5 year source testing frequency which was deemed appropriate given the potential and magnitude of impact should the baghouse fail. The Title V permit imposes no more frequent source testing or additional monitoring because this source is still deemed capable of only a "negligible" environmental impact should the baghouse fail. Opacity is never considered to be of concern from this source because it is meant to control fugitive emissions and not emissions from a combustion source. A typical baghouse in this type of application is considered a robust piece of control equipment. Historical source testing resulted in the following results:

2/10/95	run 1	0.002 gr/std ft3
2/14/95	run 1	0.000 gr/std ft3

2/14/95	run 2	0.000 gr/std ft3
2/14/95	run 3	0.000 gr/std ft3

2. Permit Condition A.5

An explanation is provided for the 84 tons/year CO limitation because it is easily misunderstood given the permitting history behind NORPAC. The overall CO emissions from all of NORPAC are much greater than 83 tons. The NORPAC operation consists of 3 paper machines, thermomechanical pulping (TMP), and deinking . The current NORPAC facility was built in phases. NORPAC I refers to Paper Machine 1 and TMP line 1-4. Permitting approval occurred in 1978. NORPAC II refers to Paper Machine 2 and the TMP lines 5-9. Permitting approval occurred in 1979. NORPAC III refers to Paper Machine 3 and the deinking operation. Permitting approval occurred in 1989. PSD 97-01 was issued in response to a review done in 1994 by Weyerhaeuser and NORPAC. This review indicated that NORPAC I and II resulted in VOC emission increases exceeding the 40-ton-per-year increase requiring a PSD permit. NORPAC II resulted in a 100-ton-per-year CO increase which also required a PSD permit. PSD 97-01 imposed a CO annual mass emission limit of 81 tons from TMP lines 5-9 and Paper Machine #2. Order DE 96AQ-I093 approved a modification to the TMP screening units which allowed a production increase of 17,520 BDMT. The CO emission factor for the TMP process is 0.3532 lb/BDMT resulting in a CO increase of 3 ton/year after the screen modifications. Condition A.5 reflects the 81 tons approved in PSD 97-01 and the 3 tons resulting from the modifications approved originally in Order DE 96AQ-I093.

1. Permit Condition B.1

No further monitoring is specified based on evaluation of the initial compliance determination results which indicated that average fiberline CO emissions were 48 lb/hr. Maximum CO emissions were 80 lb/hour. These results are considered far enough below the allowable limit (349 lbs/hr) such that further monitoring is not required. There are no CO emission controls on the specific units comprising the fiber line. The emissions and derived limits are a function of the processes that comprise the fiber line.

2. Permit Condition E.4, G.3, H.12

The ≤ 2% sulfur limit on fuel oil sulfur content for Power Boiler #6 assures compliance with the 1,000 ppm SO2 standard, based on the following calculations:

F_d = 9190 dscf/MMBtu for residual oil
("F" factor from 40 CFR, Part 60, App. A, Method 19)

$$C_d = \frac{(.02 \text{ lb S/lb oil})\ (2 \text{ lb SO2/lb S})\ (385 \text{ dscf SO2/64 lb SO2})}{(17410 \text{ Btu/lb oil})\ (9190 \text{ dscf/MMBtu})}$$

Therefore, C_d = .001503 dscf SO2/dscf flue gas = 1500 ppmv SO2

Corrected to 7% excess O2: (1500 ppmv SO2) x $\frac{20.9-7}{20.9}$ = 1000 ppmv SO2

3. Permit Condition G.1

Compliance with the 0.1 gr/dscf @7% oxygen can be determined through the following algorithms. Variables used are sourced from 40 CFR Part 60 and from EPA AP 42 documentation. The emission factor for natural gas is very conservative in that total particulate is used. EPA Method 5, unless specified, measures only the front half or filter catch. Thus the evaluation of the potential to approach the particulate limit is assumed to be very conservative.

F Factor:	Oil #6	9,190 dscf flue gas/mmbtu
(from 40 CFR Part 60)	Natural gas	8,710 dscf flue gas/mmbtu
AP-42 Emission factors:	Oil #6	19.00 lb particulate/1000 gallons-oil
(EPA AP 42)	Natural gas	7.6 lb as total particulate/mmscf

Oil:

$$\frac{19.00 \text{ lb}}{1000 \text{ gal}} * \frac{\text{gallon}}{8.30 \text{ lb}} * \frac{\text{lb oil}}{17{,}410 \text{ Btu}} * \frac{1{,}000{,}000 \text{ Btu}}{9190 \text{ dscf}} * \frac{7000 \text{ gr}}{\text{lb}} = 0.100 \text{ gr/dscf}$$

$$0.100 \text{ gr/dscf} * \frac{20.9 - 7}{20.9} = 0.067 \text{ gr/dscf @ 7\% oxygen}$$

Natural Gas:

$$\frac{7.6 \text{ lb}}{1{,}000{,}000 \text{ scf}} * \frac{\text{scf}}{1020 \text{ Btu}} * \frac{1{,}000{,}000 \text{ Btu}}{8{,}710 \text{ dscf}} * \frac{7000 \text{ gr}}{\text{lb}} = 0.006 \text{ gr/dscf}$$

$$0.006 \text{ gr/dscf} * \frac{20.9-7}{20.9} = 0.004 \text{ gr/dscf @ 7\% oxygen}$$

4. Permit Conditions G.2

The opacity monitoring requirements for boilers 6,7, and 9 differ from those required for other emission units in recognition of the type of fuels used in this unit and in recognition of the mill's own economic interest to efficiently run this unit. Visual observations are waived when these units combust only natural gas because gas is a clean burning fuel and visible emissions are not expected to be present even during "inefficient operation". This is recognized in the Federal New Source Performance Standards which do not require opacity monitoring for boilers that only combust natural gas. Visible emissions from oil burning typically result from incomplete combustion. It is in the Permittee's best economic interest to assure efficient combustion to derive the maximum energy benefits from the fuel purchased. By maintaining efficient combustion, visual emissions are minimized. The facility is required to maintain records of fuel

consumption to document what monitoring is appropriate. Additional visual monitoring is required of boilers 6,7, and 9 when they burn oil.
A visual opacity assessment, as used in this permit, is the use of an observer trained in general procedures for determining visible emissions, which could include DOE Method 9B or EPA Method 9. A trained observer does not need to have current certification in Method 9B. Under normal conditions a trained observer is expected to be present at the facility, while a certified Method 9B observer may not always be readily available. There is no specified time period over which a visual assessment must be conducted. Best professional judgement is relied upon on a case-by-case basis for determining how long to conduct a visual assessment before reaching a conclusion on whether or not corrective action is warranted in response to opacity.

5. Permit Condition G.3

See explanation for Permit Condition E.4.

6.. Permit Conditions H.6, H.7, H.8

Condition 3 of PSD-92-03 amendment 3 required Weyerhaeuser to conduct a two year study establishing the relationship between PM and PM10 emissions. If PM10 made a smaller component of PM than originally assumed (95%), the PM10 allowance would be reduced accordingly. Weyerhaeuser has completed the required study which suggests that PM10 makes up 79% of PM. The original PM10 limit of 0.027 gr/dscf is being reduced by 79% to the new limit of 0.021 gr/dscf @ 8% O2. All other limits for PM10 are also being reduced by 79%. The mechanism for adjusting PSD conditions, within the lattitude built into the PSD condition itself, has historically been accomplished in subsequent written correspondence. The change to Condition H6, H7, and H8 is being accomplished and documented within the Title V permitting process.

7. Permit Condition H.12

See explanation for Permit Condition E.4.

8. Permit Condition H.14, H.18

Ecology is requiring no further monitoring based on initial source testing results which are summarized below. The SO2 limits are 884 tpy. The NOx limits are 1179 tpy

Summary of SO2 and NOx emission test results collected during October 23-31, 1995 at the #10 recovery boiler at Weyerhaeuser Paper Company's Longview facility.

Sample Run #	SO2 lb/hr	dry tons/yr	NOx lb/hr	dry tons/yr
1	5.1	22.3	142.5	624.2
2	6.7	29.3	136.1	595.9
3	7.1	31.1	137.6	602.5
Average	6.3	27.6	138.7	607.6

9. Permit Condition H.19, H.20

Ecology is requiring no further monitoring based on initial source testing results which are summarized below. The CO limits are 1000 ppmdv and 2,564 tpy.

Summary of CO emission test results collected during October 23-31, 1995 at the #10 recovery boiler at Weyerhaeuser Paper Company's Longview facility.

Sample Run #	CO Conc (ppm)	lb/hr	dry tons/yr
1	98.7	100.1	438.2
2	94.6	92.4	404.8
3	115.2	115.7	506.8
Average	102.8	102.7	449.9

10. Condition H.21, H.22

Ecology is requiring no further monitoring based on initial source testing results which are summarized below. The limits are 50 ppmdv and 201 tpy.

Summary of VOC emission test results collected during October 23-31, 1995 at the #10 recovery boiler at Weyerhaeuser Paper Company's Longview facility.

Sample Run #	VOC Conc (dry ppm)	dry lb/hr	dry tons/yr
1	0.3	0.66	2.87
2	0.2	0.43	1.88
3	0.0	0.00	0.00
Average	0.2	0.36	1.58

11. Permit Condition I.4

This section of the Support Document has been deleted as it did not correctly reflect the current wording in PSD 92-03 Amendment 4 Conditon 14 and was no longer necessary.

12. Permit Conditions I.6, I.7

This section of the Support Document used to reference surrogate monitoring parameters which have been removed from the Permit in light of the recent federal court decision in the Apalachian Power Company et al v. EPA court decision. The court found that Title V Permits could not incorporate new monitoring requirements if monitoring was already stipulated elsewhere such as through Orders.

13. Permit Condition J.4, J.7, J.8

Conditions 12 and 13 of PSD-92-03/Order 92AQI069 Amendment 3 allow Weyerhaeuser to propose alternate means other than Reference Test Methods for verifying compliance with TRS and SO2 emission limitations. Weyerhaeuser conducted testing to determine alternate compliance indicating parameters and Ecology is incorporating these into the Title V permit. The test results are presented graphically in Appendix A of the Support Document. Graph 1 indicates the relationship between SO2 emissions and scrubber pH. Ecology has selected scrubber pH of 6.5 as a surrogate monitoring parameter to indicate compliance with the 300 ppm SO2 limit. Ecology has selected scrubber pH of 6.0 as a surrogate monitoring parameter to inidcate compliance with the 1000 ppm SO2 limit. Likewise for TRS, Graph 2 indicates the relationship between incinerator temperature and TRS emissions. The graph is a plot of many discrete samples each taken over a 16 second interval. As visually indicated by the graph, at 1350 F the majority of the time the TRS emissions are below the 5 ppm limit. Ecology has selected incinerator temperature of equal to or greater than 1350 degrees F as a surrogate monitoring parameter to indicate compliance with the 5 ppm TRS limit.

14. Permit Condition J.6

This section of the Support Document used to reference surrogate monitoring parameters which have been removed from the Permit in light of the recent federal court decision in the Apalachian Power Company et al v. EPA court decision. The court found that Title V Permits could not incorporate new monitoring requirements if monitoring was already stipulated elsewhere such as through Orders.

15. Permit Condition J.9

Ecology is requiring no further monitoring based on initial source testing results which are summarized below. The limit is 298 tpy.

Summary of SO2 emission test results collected during October 27-30, 1995 at the NCG incinerator at Weyerhaeuser Paper Company's Longview facility.

Sample Run #	(ppm @ 7% O2)	lb/hr	tons/yr
1	26.1	0.64	2.80
2	23.2	0.67	2.91
3	19.8	0.54	2.37
Average	20.4	0.62	2.69

16. Permit Condition K.9b

No ongoing monitoring for SO2 is proposed for the lime kiln based on emission testing results presented below. The SO2 emission limit is 500 ppm @ 10% O2. The lime kiln can be used to oxidize LVHC NCGs. The results below present SO2 emissions with and without the oxidation

of NCGs in the lime kiln. Weyerhaeuser states that the reason for the low SO2 emissions is that lime mud washing does not employ pulp mill evaporator condensates. This minimizes the introduction of sulfur into the lime kiln. Condition K.9b precludes the use of pulp mill evaporator condensate in lime mud washing.

SO2 emission results from LVHC NCG oxidation trials in the Lime Kiln. Testing occurred in first half of 1998.

Tests	Corrected SO2 ppm	Corrected TRS ppm	Mud Feed gpm	Rock Feed T/hr
Control 1	0	1	225	1
Control 2	0	0	215	2
Control 3	0	1	223	2
Control 4	0	1	278	0
Avg Control	0	1	235	1
NCG Trial 1	0	1	269	0
NCG Trial 2	19	2	180	2
NCG Trial 3	15	1	245	0
NCG Trial 4	25	1	275	0
NCG Trial 5	65	1	270	0
NCG Trial 6	123	1	260	4
NCG Trial Avg	41	1	250	1

17. Permit Conditions L.1

The slaker vent is a source of very little particulate even when the scrubber is not functioning effectively. Testing done in 1997 with the scrubber nozzles partially clogged resulted in emissions of 0.09 gr/dscf or about 14 lbs/day. Retesting done after cleaning the nozzles resulted in emissions of .002 gr/dscf with scrubber pressure of 23 psi. The particulate limit is 0.07 gr/dscf. Weyerhaeuser believes that a good spray patter is most important in particulate control. They believe a good spray pattern is achieved at pressure and flow of 8psig and 20 gpm. Ecology is proposing surrogate levels of 23 psig and 50 gpm. Given that a source test at 23 psig resulted in emissions far under the limit and that the source is a small source or particulate emissions Ecology is proposing to accept the 23 psig and 50 gpm as surrogate monitoring parameters.

18. Permit Condition L.2

This section of the Support Document used to reference surrogate monitoring parameters which have been removed from the Permit in light of the recent federal court decision in the Apalachian Power Company et al v. EPA court decision. The court found that Title V Permits could not

incorporate new monitoring requirements if monitoring was already stipulated elsewhere such as through Orders.

19. NESHAPS Standards

Ecology received Weyerhaeuser's case-by-case MACT applicability determination on May 18, 1999. The determination addressed the #10 Recovery Furnace, the smelt tank, and the lime kiln.

20. Permit Condition 8.

Permit Condition 8 is the generic opacity limitation from WAC 173-405-040(6) which addresses kraft mills. Permit Conditions 9 and 12 work together to assure compliance with Condition 8 by requiring, first, that facility equipment be maintained and operated "in a manner consistent with good air pollution control practice" and, second, that the permittee record and promptly respond to complaints received or possible noncompliance noticed by facility staff. Ecology believes that this is a practical and effective way to assure compliance because the emission units covered by this condition do not have control devices that can be monitored and they have very low risk of producing visible emissions except during process upsets. The mill is staffed around the clock and all staff are trained to notice and report unusual conditions, such as those associated with upsets. It is a violation of the permit to fail to take corrective action when an instance of possible noncompliance has been reported and found to be valid. Ecology believes that imposing additional monitoring such as a weekly visual inspection would have little value in identifying noncompliance and would, by presence, possibly convey a false sense of compliance.

21. Permit Condition 10.

Permit Condition 10 is the generic SO2 limitation from WAC 173-405-040(11) which addresses kraft mills. EPA raised the issue of compliance regarding this requirement given the discrete interval of testing for some units and the existence of units for which no monitoring is required. Ecology has imposed periodic discrete monitoring for those units deemed to warrant monitoring. Ecology has not imposed monitoring for units unlikely to have a reasonable potential of exceeding SO2 emission limits.

Surrogate monitoring for intervals between direct SO2 testing was not imposed because in practice mills do not adjust operating parameters to minimize SO2 emissions. There are no control devices or control strategies to allow this. Instead, SO2 emissions are largely a function of equipment and process design. The nature of the kraft process is optimized by system stability and continuity. Ecology has no professional basis to believe that process parameters fluctuate to a degree that results in SO2 emissions approaching the 1000 ppm limit and thus warranting surrogate monitoring.

22. Permit Condition 11.

Permit condition 11 consists of two parts. The first part is an inclusion of WAC 173-400-105(5)(h) which allows that monitoring and reporting requirements may be temporarily lifted during periods of monitoring system malfunction provided the permittee adequately explain such periods.

The second part of condition 11 is based on what Ecology considers an unlikely but possible scenario where recorded monitoring data is simply lost. Ecology will allow a 90% recovery rate for monitoring data if the permittee provides an adequate explanation for the cause of the lost data. Ecology expects the permittee to make every reasonable effort to maintain the integrity of all monitoring results. An allowance is specified for missing monitoring results under certain conditions so that these defined conditions are not defined as "violations," thus reducing the administrative burden on the source and the permitting authority.

III. Insignificant Emission Units

The facility-wide general requirements apply to the whole facility, including insignificant emission units and activities (IEUs), as required by the operating permit rule. The rule states, however, that IEUs are not subject to monitoring requirements unless the generally applicable requirements in the State Implementation Plan (SIP) impose them. [WAC 173-401-530(2)(c)]. The Washington SIP does not impose any specific monitoring-related requirements for the facility-wide requirements for IEUs at this source. The permit, therefore, does not require any testing, monitoring, reporting, or recordkeeping for insignificant emission units or activities.

V. Comments on Surrogate Monitoring Parameters

This first paragraph has been added to this section of the Support Document in response to comments received from Weyerhaeuser during the 30-day public comment period. Section V of this Support Document was originally written to record the thinking behind surrogate parameters used to indicate compliance. Extensive negotiation went on between Weyerhaeuser and Ecology and between Ecology and EPA concerning the use and selection of surrogate parameters. The incorporation of many surrogate parameters into previous versions of this permit was driven by EPA's interpretation of "gap filling" for ongoing monitoring. This interpretation was challenged in federal court in the Appalachian Power Company et al v. EPA court case. The court upheld that Title V Permits could not impose new monitoring requirements if monitoring requirements already existed. The bulk of the original wording has been retained to provide a history of the thinking on this issue. It is not clear that the issue has been completely put to rest and value is seen in not loosing the written record if this issue is revisited in the future.

<u>The following paragraphs below in Section V of this Support Document are left intact from the previous version and are intended to be a historical record on surrogate parameters incorporated into Title V Permits.</u>

A great deal of thought and discussion concerning surrogate parameters and continuous compliance has occurred throughout the evolution and development of Industrial Section Title V permits. Driving the discussion was the Title V requirement that each permit contain terms and conditions that assure compliance with all applicable requirements. This requirement has been interpreted to mean literally "at all times" and required gap filling monitoring to achieve this. The frequency of direct source testing was initially proposed as fulfilling the stated need to assure continuance compliance. This position was based on the belief that a surrogate parameter could indicate compliance, but could not definitively establish compliance. To attempt to rely on a surrogate parameter as a direct compliance determinant would present a weak technical basis for an enforcement action. After much discussion, it was decided to incorporate gap filling monitoring requirements designed to indicate, but not necessarily assure, compliance. Making this position more tenable was the evolution of the surrogate parameter as a trigger for corrective action on the part of the Permittee. No specific guidelines or criteria exist for determining a specific surrogate parameter setpoint. Each determination is made on a case-by-case basis exercising best professional judgement. Usually there are many operational parameters that collectively correlate with emissions. However the correlation is still not definitive enough to inappropriately limit operational flexibility by establishing in effect a straight jacket of surrogate parameter constraints. The guidance that the permit be "implementable as a practical manner" brings focus on the need to select the single best surrogate parameter that can serve as a corrective action trigger. The subsequent question then becomes what setpoint to choose.

Much of the surrogate parameter discussion concerned particulate emissions which are generally evaluated at discrete time intervals through source tests. Opacity was proposed as a surrogate monitor for particulate emissions. This imposed some consistency in surrogate parameters among various types of combustion emission units. Ecology chose the opacity limit itself as the surrogate parameter setpoint triggering corrective action. The opacity/particulate relationship is variable both between similar types of emission units and within an emission unit itself. Choosing the opacity limit sets the threshold for corrective action at a point which unequivocally warrants a corrective action response. Lacking federal criteria for acceptance and evaluation of surrogate monitoring parameters, Ecology deems this approach the most appropriate from a technical and enforcement perspective.

EPA requested substantiation of the opacity limit itself as the appropriate setpoint for corrective action. Of particular concern was the 25% opacity setpoint for the lime kiln which had exceeded its particulate limit once during 1999. Ecology examined this unit in depth to validate the thinking behind selecting the opacity limit itself as the setpoint. A scattergram allowing assessment of the visual relationship between opacity and particulate revealed that the particulate limit would not be exceeded at an opacity of about 35%. The variability between opacity and particulate was very large and showed only a general trend toward higher particulate emissions as opacity increased. This relationship was as Ecology expected and confirms the use of the opacity limit itself as a trigger point for corrective action. Exceedance of the opacity limit itself is a corrective action setpoint which unequivocally warrants corrective action.

V. Regulatory Status of Recovery Furnace and Smelt Tank

Weyerhaeuser claims the recovery furnace and smelt tank were started up after construction in June 1975. This predates the NSPS applicability date of September 24, 1976 set forth in 40 CFR 60.280(b).

VI, Regulatory Orders

The permittee is currently subject to many regulatory orders. Copies of the orders are provided In Appendices of the Permit itself.

An important issue regarding any Title V permit is the basis of authority for the applicable requirements. This is particularly true regarding monitoring and reporting requirements. The basis of authority is used to determine federal or state-only applicability. Many of the applicable requirements come from orders issued by Ecology. The period of time during which these various orders were issued spans decades. Early on in the permitting process Ecology attempted to sort out the regulatory basis for the orders. Ecology determined that this was not possible. Many of the orders originated years ago and the basis of authority was not clearly set forth at the time of issuance. Also order consolidation has gone on in the past further confusing the original basis of authority. Ecology decided the effort, besides being difficult, was not necessary as WAC 173-401-615 offered a solution to this problem. With the permittee's agreement in the case of Weyerhaeuser, the issue of state-only or federal applicability was put aside as it was agreed to rely entirely on WAC 173-401-615 as the basis of authority for the type and frequency of monitoring. WAC 173-401-615 requires monitoring and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. This regulation is federally enforceable. Monitoring and recordkeeping requirements based on this regulation are federally enforceable.

VII. PSD Annual Mass Limits and Rolling Averages

EPA has provided preliminary comments on several mass emission limitations originating in PSD Orders. The issue is whether the annual mass limitations are acceptable as written or must be reconfigured as rolling averages to be enforceable as a practical matter. Ecology understands EPA's most recent position to be that mass limitations imposed to net out of PSD must be based on rolling averages. Once an emission rate triggers PSD, a mass emission limitation can be imposed which is not necessarily on a rolling average basis. Ecology has investigated whether any of the annual mass limitations imposed through PSD were designed to net out of PSD. None were found. The annual mass limitations imposed through PSD are identified below.

Title V Permit Condition	PSD Avoidance	Title V Permit Condition	PSD Avoidance
A4 for VOC	No	F13 for VOC	No
A5 for CO	No	H5 for PM	No
B1 for CO	No		
F1 & F2 for PM10	No		
F6 for SO2	No		
F9 for NOx	No		

Appendix A.

Graphical Results of August 1998 Wey-Longview NCG Incinerator/Scrubber Compliance Indicator Trials.

Graph 1. Relationship between scrubber exhaust SO2 and scrubber flow pH.

Graph 2. Relationship between incineration temperature and scrubber exhaust gas TRS concentrations.

Appendix B.
Response to Comments

The only comments received during the public comment period were from Weyerhaeuser. The response to comments are listed below. They respond in chronological order to the list of comments dated from Weyerhaeuser on August 25 and received by Ecology on August 29, 2000. Weyerhaeuser is referred to as Wey in the response to comments simply to expedite the typing of the responses.

Comment 1. Wey requested that NORPAC be spelled out in the Intro and Legal Authority section of the permit. **Response.** The acronym is spelled out in the second paragraph of this section.

Comment 2. Wey requested deletion of the last sentence of the second paragraph of page 4 of the permit suggesting it led to ambiguity. **Response.** This sentence was added after discussion with EPA in which they were adamant about specifying a "gold standard" for compliance determination but which would not necessarily be used by the Permittee for ongoing monitoring. A generic example is stating that Method 9 be used for official opacity compliance determination but allowing the use of a less formal visual observation for ongoing monitoring. The sentence has not been changed.

Comment 3. Wey requested a more definitive split between NORPAC and Weyerhaeuser be inserted at page 4 of the permit. **Response.** The change has not been made. Ecology has already had extensive discussion with Weyerhaeuser and the Attorney General's office concerning this issue. It is up to Weyerhaeuser to internally decide how to assign liability. Ecology has chosen not to separate NORPAC and Weyerhaeuser primarily to simplify implementation and enforcement of the Title V permit.

Comment 4. This comment is the same as comment #3 but references page 6 of the permit where Kraft mill emission units are addressed. **Response.** See response to comment #3.

Comment 5. Wey requested wording changes to Condition B.5 which would reference Condition J.2 and J.3 as a source for monitoring and reporting information. **Response.** The changes have not been made. Ecology does not believe the requested change would necessarily provide clarification as NCGs are sometimes also treated in the lime kiln.

Comment 6. Wey requested the deletion of Condition C which required record keeping for storage tanks greater than 10,000 gallons, holding VOCs and meeting other criteria. Wey stated that a record review indicated no tanks were in use on-site meeting the criteria. The requirement was not applicable at this time. **Response.** This condition has been adjusted to note that it is a generic condition in pulp and paper Title V permits but is not an applicable requirement at this time.

Comment 7. On hold. Wey needs to provide reason why these are now applicable.

Comment 8. Wey requested that the wording behind particulate testing be standardized and made the same as the wording in Condition E. **Response.** The change has not been made. The difference in the wording does not matter. In the case of the lime kiln the permit simply reiterates the wording in the underlying Order.

Comment 9. Wey requested changing the source testing frequency in Condition H7 to reflect the frequency stipulated in PSD Condition 4. **Response.** The change has been made in the permit.

Comment 10. Wey requested changing CEM to COM in Conditions H9, H10, K5, and K6. **Response.** These conditions refer to opacity monitors. The requested change has been made.

Comment 11. This comment involves Condition H10, K6. Multiple opacity standards are applicable for several emission units covered by the permit. Ecology repeated the COM requirements imposed by the most restrictive opacity standard in defining COM requirements for less restrictive opacity standards. Wey claims that COMs are not required for the less stringent opacity standards. **Response.** WAC 173-405-072(3)(b) states that COMs will be used if available. The introduction to WAC 173-405-072 states that, "each mill shall conduct routine monitoring of emissions in accordance with a program that has been approved by ecology." Ecology believes COMs are required in this case given that they are available and can be used on this emission unit. However, Ecology has rewritten the monitoring requirement for Condition H10 and K6 because respective Conditions H9 and K5 set forth adequate COM performance standards for the more restrictive opacity limits. The same COM units in each emission unit are used for monitoring compliance with the different opacity limits.

Comment 12. Wey requested deletion of the word "test" in the last sentence of Condition H17. **Response.** The deletion has been made. The word "test" is out of context for the reporting of CEM results.

Comment 13. Wey requested deletion of wording referencing monitoring parameters that are no longer in the permit. The request is for Permit Conditions I3, I4, I6, I7, K2. These parameters were originally in the permit at EPA's insistent to meet their interpretation of "gap filling". The gap filling monitoring requirements were removed from the permit prior to going to public comment based on the recent federal court decision on monitoring requirements. The associated wording Wey references refer to permit conditions that are no longer in the permit. **Response.** Ecology has removed the wording citing the nonexistence permit conditions.

Comment 14. Wey requested deleting some wording in Condition K.1.b because the wording is considered explanatory. **Response. Need to come back and finish this one.**

Comment 15. Wey requested deletion of wording referencing monitoring parameters that are no longer in the permit. **Response.** This comment concerns Condition K2. See response to Comment 13.

Comment 16. This comment concerns Condition K6**. Response.** See response to Comment 11.

Comment 17. Wey requested deletion of wording in Condition K.9b which they consider "vague and open to arbitrary interpretation". **Response.** Ecology has not made the requested change. No direct source testing is required for SO2 at the lime kiln. The O&M requirements Wey is referring to are considered easily implemented operating practices which minimize SO2 emissions to the extent that direct source testing on an ongoing basis is not warranted. Weyerhaeuser did not object to these O&M requirements when complying with them meant not having to perform ongoing direct source testing.

Comment 18. This comment concerns Condition L1. Wey requested deletion of the surrogate parameter monitoring citing the Appalachian Power Co et al v. EPA federal decision. **Response.** Ecology has not made the requested change as there is no periodic source testing to verify compliance. The surrogate parameters themselves are relied upon to provide an indication of compliance.

Comment 19. Wey requested wording be added to the NSPS introduction which would address liability between NORPAC and Wey. **Response.** Ecology has not made the requested change. See response to Comment 3.

Comment 20. Wey requested the term "Facility-Wide" be changed to "Source-Wide" in the introduction to the general requirements on page 16 of the permit. **Response.** Ecology has not made the change as the term "Facility-Wide" is considered to be synonymous with "Source-Wide" in the context used.

Comment 21. Wey requested that Facility-Wide General Requirement #18 be deleted as Wey claims it is not applicable to the Longview facility. **Response.** Ecology has not made the change. EPA had wanted this condition in the permits. It is in all the permits issued since EPA stated their desire for its inclusion. The condition imposes no requirement if not applicable to the Permittee. If it becomes applicable it will already be in the permit and will alleviate the need for a permit modification.

Comment 22. Wey requested clarification on when the compliance certification, required by facility-wide general requirement #37, would be due. **Response.** The initial compliance certification is due within 12 months after the effective permit date. Subsequent yearly periods cover 365 days but do not necessarily run from January 1 to December 31 of a given year. Rather the yearly period is 365 days from the effective date of the permit. If this permit's effective date was November 1, 2000, the initial compliance certification would be due November 1, 2001. Subsequent compliance certifications would be due within 45 days following November 1 of each calendar year. Wording as been added to facility-wide general requirement #37 to clarify that yearly means a 365 day period and not a calendar year.

Comment 23. Wey requests the addition to Appendix A of 40 CFR Part 60, Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units as an inapplicable requirement. Wey claims they do not have this type of unit. **Response.** The requested change has been made.

Comment 24. Wey requests that references to components of 40 CFR Part 60 Subparts Da, Db, and Dc be deleted from the inapplicable requirements of Appendix A as the Subparts Da, Db, and Dc themselves have been claimed as inapplicable. **Response.** The requested change has been made.

Comment 25. Wey requests inclusion of Order De 94AQ-I080 in the permit as it establishes the PM limit for #11 PB. **Response.** The Order has been added to the permit.

Comment 26. Wey requested that the Support Document be modified such that the explanation for Permit Condition G.1 proceed the explanation for G.2. **Response.** The requested change has been made.

Comment 27. Wey requested the addition of clarifying wording to page 6 Section 6 of the Support Document. **Response.** The requested change was not made as it is not clear what confusion or need for clarification Wey is referring to.

Comment 28. Wey noted that the Support Document references several permit conditions which have been renumbered. Specifically, the Support Document incorrectly references H14 as H13, H18 as H15, H19 as H18, H20 as H19, H21 as H20, and H22 as H21. **Response.** The Support Document has been modified to cite the correct permit conditions.

Comment 29. Wey notes that Section 11 of the Support Document is not current in that it references a previous version of the applicable PSD Order. **Response.** The current applicable Condition 14 in PSD92-03 amendment 4 no longer references surrogate monitoring. The reference to Permit Condition I.4 in the Support Document has been deleted and Permit Condition I.4 modified to accurately reflect the current PSD Condition 14 wording.

Comment 30. Wey notes several sections of the Support Document that referenced surrogate monitoring parameters that are no longer incorporated into the Permit. **Response.** The surrogate monitoring parameters had been incorporated into the permit at EPA insistence to meet their interpretation of "gap filling". The federal court struck down EPA's interpretation in the Appalachian Power Company et al v. EPA court decision. Sections 12, 14, and 15 of the Support Document have been deleted from the Support Document as they referenced surrogate monitoring which is no longer incorporated into the permit.

Comment 31. Wey requested the removal of surrogate monitoring parameters from Permit Condition L.2. They relied on the Appalachian Power Company et al v EPA court decision striking down the imposition of additional monitoring requirements in Title V Permits if monitoring requirements had already been stipulated. **Response.** Ecology has not made the

requested change as there were no existing monitoring requirements for opacity from the slaker vent scrubber stack. Ecology does not believe the Appalachian Power Company et al v EPA court decision is applicable in this case.

Comment 32. Wey noted that the Section V of the Support Document contained an extensive discussion on surrogate parameters used as compliance indicators which needed editing in light of the Appalachian Power Company et al v EPA court decision and subsequent changes to the Permit itself. **Response.** This section of the Support Document has been edited to reflect changes to the permit. An introductory paragraph has been added to put the remaining text in proper context. The bulk of the original wording has been retained to provide a history of the thinking on this issue. It is not clear that the issue has been completely put to rest and value is seen in not loosing the written record if this issue is revisited in the future.

Comment 33. During the comment period, in a separate letter Weyerhaeuser informed Ecology that NSPS 40 CFR 60, Subpart D was applicable to Hog fuel boiler #11. **Response.** The monitoring requirements were revised to meet the requirements of NSPS 40 CFR 60, Subpart D and 40 CFR § 60.40-60.48 were removed from the inapplicable requirements table in appendix A.

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